

# [DISCUSSION DRAFT]

MAY 17, 2007

## 1    **TITLE I—PROMOTING ENERGY** 2                                    **EFFICIENCY**

### 3    **Subtitle A—Appliance Efficiency**

#### 4    **SEC. 101. ENERGY STANDARDS.**

5            (a) APPLIANCES.—The Energy Policy and Conserva-  
6    tion Act is amended as follows:

7                    (1) DEHUMIDIFIERS.—Section 325(cc)(2) (42  
8            U.S.C. 6295(cc)(2)) is amended to read as follows:

9            “(2) Dehumidifiers manufactured on or after October  
10    1, 2012, shall have an Energy Factor that meets or ex-  
11    ceeds the following values:

<b>“Product Capacity (pints/day):</b>	<b>Minimum Energy Factor (liters/ KWh)</b>
Up to 35.00 .....	1.35
35.01-45.00 .....	1.50
45.01-54.00 .....	1.60
54.01-75.00 .....	1.70
Greater than 75.00 .....	2.5”.

12                    (2) RESIDENTIAL CLOTHESWASHERS AND RESI-  
13            DENTIAL    DISHWASHERS.—Section 325(g) (42  
14            U.S.C. 6295(g)) is amended by adding at the end  
15            the following new paragraphs:

16            “(9) Clotheswashers manufactured on or after Janu-  
17    ary 1, 2011, shall have—

1           “(A) a Modified Energy Factor of at least 1.26;  
2           and

3           “(B) a water factor of not more than 9.5.

4           “(10) No later than December 31, 2011, the Sec-  
5   retary shall publish a final rule determining whether to  
6   amend the standards in effect for clotheswashers manufac-  
7   tured on or after January 1, 2015. Such rule shall contain  
8   such amendment, if any.

9           “(11) Dishwashers manufactured on or after January  
10  1, 2010, shall—

11           “(A) for standard size dishwashers not exceed  
12       355 kwh/year and 6.5 gallon per cycle; and

13           “(B) for compact size dishwashers not exceed  
14       260 kwh/year and 4.5 gallons per cycle.

15           “(12) No later than January 1, 2015, the Secretary  
16   shall publish a final rule determining whether to amend  
17   the standards for dishwashers manufactured on or after  
18   January 1, 2018. Such rule shall contain such amend-  
19   ment, if any.”.

20           (3) ENERGY CONSERVATION STANDARD.—Sec-  
21   tion 321(6)(A) (42 U.S.C. 6291(6)(A)) is amended  
22   by striking “or, in the case of” and inserting “and,  
23   in the case of residential clotheswashers, residential  
24   dishwashers,”.

1 (4) REFRIGERATORS AND FREEZERS.—Section  
2 325(b) (42 U.S.C. 6295(b)) is amended by adding  
3 at the end the following new paragraph:

4 “(4) Not later than December 31, 2010, the Sec-  
5 retary shall publish a final rule determining whether to  
6 amend the standards in effect for refrigerators, refrig-  
7 erator-freezers, and freezers manufactured on or after  
8 January 1, 2014. Such rule shall contain such amend-  
9 ment, if any.”.

10 (b) ENERGY STAR.—Section 324A(d)(2) of the En-  
11 ergy Policy and Conservation Act (42 U.S.C. 6294a(d)(2))  
12 is amended by striking “January 1, 2010” and inserting  
13 “July 1, 2009”.

14 **SEC. 102. MOTOR EFFICIENCY STANDARDS.**

15 (a) DEFINITIONS.—Section 340(13) of the Energy  
16 Policy and Conservation Act (42 U.S.C. 6311(13)) is  
17 amended—

18 (1) by redesignating subparagraphs (B)  
19 through (H) as subparagraphs (C) through (I), re-  
20 spectively; and

21 (2) by striking the text of subparagraph (A)  
22 and inserting the following: “The term ‘general pur-  
23 pose electric motor (subtype I)’ means any motor  
24 that meets the definition of ‘General Purpose’ as es-  
25 tablished in the final rule issued by the Department

1 of Energy for ‘Energy Efficiency Program for Cer-  
2 tain Commercial and Industrial Equipment: Test  
3 Procedures, Labeling, and Certification Require-  
4 ments for Electric Motors’ (10 CFR 431), as in ef-  
5 fect on the date of enactment of the [short title].

6 “(B) The term ‘general purpose electric motor  
7 (subtype II)’ means motors incorporating the design ele-  
8 ments of a general purpose electric motor (subtype I) that  
9 are configured as one of the following:

10 “(i) U-Frame Motors.

11 “(ii) Design C Motors.

12 “(iii) Close-coupled pump motors.

13 “(iv) Footless motors.

14 “(v) Vertical solid shaft normal thrust motor  
15 (as tested in a horizontal configuration).

16 “(vi) 8-pole motors (~900 rpm).

17 “(vii) All poly-phase motors with voltages up to  
18 600 volts other than 230/460 volts.”.

19 (b) STANDARDS.—Section 342(b) of the Energy Pol-  
20 icy and Conservation Act (42 U.S.C. 6313(b)) is amended  
21 by striking the text of paragraph (1) and inserting the  
22 following: “(A) Each general purpose electric motor  
23 (subtype I), except as provided in subparagraph (B), with  
24 a power rating of 1 horsepower or greater, but not greater  
25 than 200 horsepower, manufactured (alone or as a compo-

1    nent of another piece of equipment) after the 36-month  
2    period beginning on the date of enactment of the [short  
3    title], shall have a nominal full load efficiency not less  
4    than as defined in NEMA MG-1 (2006) Table 12-12.

5       “(B) Each fire pump motor manufactured (alone or  
6    as a component of another piece of equipment) after the  
7    36-month period beginning on the date of enactment of  
8    the [short title], shall have nominal full load efficiency not  
9    less than as defined in NEMA MG-1 (2006) Table 12-  
10 11.

11       “(C) Each general purpose electric motor (subtype  
12 II) with a power rating of 1 horsepower or greater, but  
13 not greater than 200 horsepower, manufactured (alone or  
14 as a component of another piece of equipment) after the  
15 36-month period beginning on the date of enactment of  
16 the [short title], shall have a nominal full load efficiency  
17 not less than as defined in NEMA MG-1 (2006) Table  
18 12-11.

19       “(D) Each NEMA Design B, general purpose electric  
20 motor with a power rating of more than 200 horsepower,  
21 but not greater than 500 horsepower, manufactured  
22 (alone or as a component of another piece of equipment)  
23 after the 36-month period beginning on the date of enact-  
24 ment of the [short title], shall have a nominal full load

1 efficiency not less than as defined in NEMA MG-1 (2006)  
 2 Table 12-11.”.

3 **SEC. 103. RESIDENTIAL BOILERS.**

4 Section 325(f) of the Energy Policy and Conservation  
 5 Act (42 U.S.C. 6925(f)) is amended—

6 (1) in the subsection heading, by inserting  
 7 “AND BOILERS” after “FURNACES”;

8 (2) in paragraph (1), by striking “except that”  
 9 and all that follows through “(B)” and inserting  
 10 “except that”;

11 (3) by redesignating paragraph (3) as para-  
 12 graph (4); and

13 (4) by inserting after paragraph (2) the fol-  
 14 lowing:

15 “(3) BOILERS.—

16 “(A) IN GENERAL.—Subject to subparagraph  
 17 (B), boilers manufactured on or after September 1,  
 18 2012, shall meet the following requirements:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Gas Hot Water .....	82%	No Constant Burning Pilot, Automatic Means for Adjusting Water Temperature
Gas Steam .....	80%	No Constant Burning Pilot

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Oil Hot Water .....	84%	Automatic Means for Adjusting Temperature
Oil Steam .....	82%	None
Electric Hot Water .....	None	Automatic Means for Adjusting Temperature
Electric Steam .....	None	None

1           “(B) AUTOMATIC MEANS FOR ADJUSTING  
2           WATER TEMPERATURE.—

3           “(i) IN GENERAL.—The manufacturer  
4           shall equip each gas, oil and electric hot water  
5           boiler, except boilers equipped with tankless do-  
6           mestic water heating coils, with automatic  
7           means for adjusting the temperature of the  
8           water supplied by the boiler to ensure that an  
9           incremental change in inferred heat load pro-  
10          duces a corresponding incremental change in  
11          the temperature of water supplied.

12          “(ii) SINGLE INPUT RATE.—For a boiler  
13          that fires at one input rate this requirement  
14          may be satisfied by providing an automatic  
15          means that allows the burner or heating ele-  
16          ment to fire only when such means has deter-  
17          mined that the inferred heat load cannot be met  
18          by the residual heat of the water in the system.

1           “(iii) NO INFERRED HEAT LOAD.—When  
2           there is no inferred heat load with respect to a  
3           hot water boiler, the automatic means described  
4           in clause (i) and (ii) shall limit the temperature  
5           of the water in the boiler to not more than 140  
6           degrees Fahrenheit.

7           “(iv) OPERATION.—A boiler described in  
8           clause (i) or (ii) shall be operable only when the  
9           automatic means described in clauses (i), (ii)  
10          and (iii) is installed.”.

11 **SEC. 104. REGIONAL VARIATIONS IN HEATING OR COOLING**  
12 **STANDARDS.**

13          (a) CONSUMER APPLIANCES.—Section 325(o) of the  
14 Energy Policy and Conservation Act (42 U.S.C. 6925(o))  
15 is amended by adding at the end the following new para-  
16 graph:

17          “(6)(A) The Secretary may establish regional stand-  
18 ards for space heating and air conditioning products, other  
19 than window-unit air-conditioners and portable space  
20 heaters. For each space heating and air conditioning prod-  
21 uct, the Secretary may establish no more than three re-  
22 gions with differing standards. Any standards set for any  
23 such region shall achieve the maximum level of energy sav-  
24 ings that are technically feasible and economically justified  
25 within that region. Regional boundaries shall follow State



1 borders and only include contiguous States (except Alaska  
2 and Hawaii).

3 “(B) If the Secretary establishes regional standards,  
4 it shall be unlawful under section 332 to offer for sale  
5 at retail, sell at retail, or install noncomplying products  
6 except within the specified regions.

7 “(C)(i) Except as provided in clause (ii), no product  
8 manufactured to a regional standard established pursuant  
9 to subparagraph (A) shall be distributed in commerce  
10 without a prominent label affixed to the product which in-  
11 cludes at the top of the label, in print of not less than  
12 14-point type, the following: ‘It is a violation of Federal  
13 law for this product to be installed in any State outside  
14 the region shaded on the map printed on this label.’.  
15 Below this notice shall appear a map of the United States  
16 with clearly defined State boundaries and names, and with  
17 all States in which the product meets or exceeds the stand-  
18 ard established pursuant to subparagraph (A) shaded in  
19 a color or a manner as to be easily visible without obscur-  
20 ing the State boundaries and names. Below the map shall  
21 be printed on each label the following: ‘It is a violation  
22 of Federal law for this label to be removed, except by the  
23 owner and legal resident of any single-family home in  
24 which this product is installed.’.

1       “(ii) A product manufactured that meets or exceeds  
2 all regional standards established under this paragraph  
3 shall bear a prominent label affixed to the product which  
4 includes at the top of the label, in print of not less than  
5 14-point type the following: ‘This product has achieved an  
6 energy efficiency rating under Federal law allowing its in-  
7 stallation in any State.’.

8       “(D) Manufacturers of space heating and air condi-  
9 tioning equipment subject to regional standards estab-  
10 lished under this paragraph shall obtain and retain  
11 records on the intended installation locations of the equip-  
12 ment sold, and shall make such records available to the  
13 Secretary on request.”.

14       (b) INDUSTRIAL EQUIPMENT.—Section 342(a) of the  
15 Energy Policy and Conservation Act (42 U.S.C. 6313(a))  
16 is amended by adding at the end the following new para-  
17 graph:

18       “(10)(A) The Secretary may establish regional stand-  
19 ards for space heating and air conditioning products sub-  
20 ject to this subsection. For each space heating and air con-  
21 ditioning product, the Secretary may establish no more  
22 than three regions with differing standards. Any stand-  
23 ards set for any such region shall achieve the maximum  
24 level of energy savings that are technically feasible and  
25 economically justified within that region. Regional bound-

aries shall follow State borders and only include contiguous States (except Alaska and Hawaii).

“(B) If the Secretary establishes regional standards, it shall be unlawful under section 345 to offer for sale at retail, sell at retail, or install noncomplying products except within the specified regions.

“(C) Manufacturers of space heating and air conditioning equipment subject to regional standards established under this paragraph shall obtain and retain records on the intended installation locations of the equipment sold, and shall make such records available to the Secretary on request.”.

**SEC. 105. PROCEDURE FOR PRESCRIBING NEW OR AMENDED STANDARDS.**

Section 325(p) of the Energy Policy and Conservation Act (42 U.S.C. 6925(p)) is amended—

(1) by striking paragraph (1); and

(2) by redesignating paragraphs (2) through

(4) as paragraphs (1) through (3), respectively.

**SEC. 106. EXPEDITING APPLIANCE STANDARDS RULEMAKINGS.**

Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6925) is amended by adding at the end the following new subsection:

1       “(hh) EXPEDITED RULEMAKING FOR CONSENSUS  
2 STANDARDS.—(1) The Secretary shall proceed with an ex-  
3 pedited rulemaking based on an energy conservation  
4 standard or test procedure recommended by interested  
5 persons, if—

6               “(A) interested persons, demonstrating signifi-  
7 cant and broad support from manufacturers of a  
8 covered product, States, and environmental, energy  
9 efficiency, and consumer advocates, submit a joint  
10 comment recommending a consensus energy con-  
11 servation standard or test procedure; and

12               “(B) the Secretary determines that the joint  
13 comment includes evidence which, assuming no other  
14 evidence were considered, provides an adequate basis  
15 for determining that the proposed consensus energy  
16 conservation standard or test procedure proposed in  
17 the joint comment complies with the provisions and  
18 criteria of this Act, including subsection (o), that  
19 apply to the type or class of covered products cov-  
20 ered by the joint comment.

21       “(2) Notwithstanding subsection (p) and section  
22 336(a), if the Secretary receives a joint comment that  
23 meets the criteria described in paragraph (1), the Sec-  
24 retary shall proceed with an expedited rulemaking with re-

1 spect to the standard or test procedure proposed in the  
2 joint comment as follows:

3 “(A) Not later than 60 days after receipt of the  
4 joint comment, with a maximum of two 30-day ex-  
5 tensions at the Secretary’s discretion, the Secretary  
6 shall publish a determination as to whether the pro-  
7 posed standard or test procedure in the joint com-  
8 ment meets the criteria described in paragraph (1).

9 “(B) If the Secretary determines that the pro-  
10 posed consensus standard or test procedure in the  
11 joint comment meets the criteria described in para-  
12 graph (1), not later than 60 days after such deter-  
13 mination the Secretary shall publish a proposed rule  
14 proposing the consensus standard or test procedure  
15 included in the joint comment.

16 “(C) Notwithstanding paragraphs (1) and (2)  
17 of subsection (p), the public comment period with re-  
18 spect to such a proposed rule shall be 30 days after  
19 publication of the proposed rule in the Federal Reg-  
20 ister.

21 “(D) Notwithstanding section 336(a), the Sec-  
22 retary may waive the holding of a public hearing  
23 with respect to the proposed rule.

24 “(E) Notwithstanding subsection (p)(3), the  
25 Secretary may publish a final rule at any time after

1       60 days after publication of the proposed rule in the  
2       Federal Register, and shall publish a final rule with-  
3       in 120 days after publication of the proposed rule in  
4       the Federal Register, plus any extension of up to 60  
5       days as the Secretary considers necessary for re-  
6       views conducted by individuals who are not employ-  
7       ees of the Department of Energy.”.

8       **SEC. 107. CORRECTION OF LARGE AIR CONDITIONER RULE**  
9                               **ISSUANCE CONSTRAINT.**

10       (a) DEFINITIONS.—Section 340 of the Energy Policy  
11       and Conservation Act (42 U.S.C. 6311) is amended by  
12       adding the following new paragraphs at the end:

13               “(22) The term ‘single package vertical air con-  
14       ditioner’ means air-cooled commercial package air  
15       conditioning and heating equipment, factory assem-  
16       bled as a single package having its major compo-  
17       nents arranged vertically, which is an encased com-  
18       bination of cooling and optional heating components,  
19       is intended for exterior mounting on, adjacent inte-  
20       rior to, or through an outside wall, and is powered  
21       by a single-phase or three-phase current. It may  
22       contain one or more separate indoor grilles, outdoor  
23       louvers, various ventilation options, indoor free air  
24       discharge, ductwork, well plenum, or sleeve. Heating  
25       components may include electrical resistance, steam,

1 hot water, or gas, but may not include reverse cycle  
2 refrigeration as a heating means.

3 “(23) The term ‘single package vertical heat  
4 pump’ means a single package vertical air condi-  
5 tioner that utilizes reverse cycle refrigeration as its  
6 primary heat source, that may include secondary  
7 supplemental heating by means of electrical resist-  
8 ance, steam, hot water, or gas.”.

9 (b) STANDARDS.—Section 342(a) of the Energy Pol-  
10 icy and Conservation Act (42 U.S.C. 6313(a)) is amend-  
11 ed—

12 (1) in each of paragraphs (1) and (2) by insert-  
13 ing after “heating equipment” in the first sentence  
14 “, including single package vertical air conditioners  
15 and single package vertical heat pumps,”;

16 (2) in paragraph (6)(A)(ii)—

17 (A) by striking “5” and inserting “2”;

18 (B) by striking “the effective date of a  
19 standard” and inserting “January 10, 2010, or  
20 beginning on the effective date of the most re-  
21 cent revision made under clause (i),”; and

22 (C) by adding the following new clause at  
23 the end:

24 “(iii) The Secretary may only initiate a rulemaking  
25 under clause (ii) for a particular product so long as any

1 standard established under a previous rulemaking with re-  
2 spect to that product has become effective.”;

3 (3) in each of paragraphs (7), (8), and (9) by  
4 inserting after “heating equipment” in the first sen-  
5 tence “, excluding single package vertical air condi-  
6 tioners and single package vertical heat pumps,”;

7 (4) in paragraph (7) by adding at the end the  
8 following new subparagraphs:

9 “(D) The minimum seasonal energy efficiency  
10 ratio of air-cooled three-phase electric central air  
11 conditioners and central air conditioning heat pumps  
12 less than 65,000 Btu per hour (cooling capacity),  
13 split systems, shall be 13.0.

14 “(E) The minimum seasonal energy efficiency  
15 ratio of air-cooled three-phase electric central air  
16 conditioners and central air conditioning heat pumps  
17 less than 65,000 Btu per hour (cooling capacity),  
18 single package, shall be 13.0.

19 “(F) The minimum heating seasonal perform-  
20 ance factor of air-cooled three-phase electric central  
21 air conditioning heat pumps less than 65,000 Btu  
22 per hour (cooling capacity), split systems, shall be  
23 7.7.

24 “(G) The minimum heating seasonal perform-  
25 ance factor of air-cooled three-phase electric central



1 air conditioning heat pumps less than 65,000 Btu  
2 per hour (cooling capacity), single package, shall be  
3 6.6.

4 “(H) The minimum energy efficiency ratio of  
5 water-cooled, evaporatively-cooled and water-source  
6 central air conditioners and central air conditioning  
7 heat pumps less than 65,000 Btu per hour (cooling  
8 capacity) shall be 9.3 (at a standard rating of 95 de-  
9 grees F db, outdoor temperature for evaporatively  
10 cooled equipment, and 85 degrees Fahrenheit enter-  
11 ing water temperature for water-source and water-  
12 cooled equipment).

13 “(I) The minimum energy efficiency ratio of  
14 water-cooled, evaporatively-cooled and water-source  
15 central air conditioners and central air conditioning  
16 heat pumps at or above 65,000 Btu per hour (cool-  
17 ing capacity) and less than 135,000 Btu per hour  
18 (cooling capacity) shall be 10.5 (at a standard rating  
19 of 95 degrees F db, outdoor temperature for evapo-  
20 ratively cooled equipment, and 85 degrees Fahr-  
21 enheit entering water temperature for water source  
22 and water-cooled equipment).

23 “(J) The minimum coefficient of performance  
24 in the heating mode of water-source heat pumps less  
25 than 135,000 Btu per hour (cooling capacity) shall

1 be 3.8 (at a standard rating of 70 degrees Fahr-  
2 enheit entering water).”;

3 (5) in paragraph (8) by adding at the end the  
4 following new subparagraph:

5 “(D) The minimum energy efficiency ratio of  
6 water-cooled and evaporatively-cooled central air  
7 conditioners and central air conditioning heat pumps  
8 at or above 135,000 Btu per hour (cooling capacity)  
9 and less than 240,000 Btu per hour (cooling capac-  
10 ity) shall be 9.6 (according to ARI Standard 360-  
11 86).”; and

12 (6) by adding the following new paragraph at  
13 the end:

14 “(10) Single package vertical air conditioners and  
15 single package vertical heat pumps manufactured on or  
16 after January 1, 2010, shall meet the following standards:

17 “(A) The minimum energy efficiency ratio of  
18 single package vertical air conditioners less than  
19 65,000 Btu per hour (cooling capacity), single-  
20 phase, shall be 9.0.

21 “(B) The minimum energy efficiency ratio of  
22 single package vertical air conditioners less than  
23 65,000 Btu per hour (cooling capacity), three-phase,  
24 shall be 9.0.

1           “(C) The minimum energy efficiency ratio of  
2           single package vertical air conditioners at or above  
3           65,000 Btu per hour (cooling capacity) but less than  
4           135,000 Btu per hour (cooling capacity), shall be  
5           8.9.

6           “(D) The minimum energy efficiency ratio of  
7           single package vertical air conditioners at or above  
8           135,000 Btu per hour (cooling capacity) but less  
9           than 240,000 Btu per hour (cooling capacity), shall  
10          be 8.6.

11          “(E) The minimum energy efficiency ratio of  
12          single package vertical heat pumps less than 65,000  
13          Btu per hour (cooling capacity), single-phase, shall  
14          be 9.0; and the minimum coefficient of performance  
15          in the heating mode shall be 3.0.

16          “(F) The minimum energy efficiency ratio of  
17          single package vertical heat pumps less than 65,000  
18          Btu per hour (cooling capacity), three-phase, shall  
19          be 9.0; and the minimum coefficient of performance  
20          in the heating mode shall be 3.0.

21          “(G) The minimum energy efficiency ratio of  
22          single package vertical heat pumps at or above  
23          65,000 Btu per hour (cooling capacity) but less than  
24          135,000 Btu per hour (cooling capacity), shall be

1 8.9; and the minimum coefficient of performance in  
2 the heating mode shall be 3.0.

3 “(H) The minimum energy efficiency ratio of  
4 single package vertical heat pumps at or above  
5 135,000 Btu per hour (cooling capacity) but less  
6 than 240,000 Btu per hour (cooling capacity), shall  
7 be 8.6; and the minimum coefficient of performance  
8 in the heating mode shall be 2.9.”.

9 **SEC. 108. MULTIPLE STANDARDS.**

10 (a) CONSUMER APPLIANCES.—Section 325(o)(5) of  
11 the Energy Policy and Conservation Act (42 U.S.C.  
12 6925(o)(5)) is amended by inserting “If a covered product  
13 includes 2 or more independent energy-using features, the  
14 Secretary may set more than 1 energy conservation  
15 standard for that covered product with respect to those  
16 features.” after “each major function.”.

17 (b) INDUSTRIAL EQUIPMENT.—Section 342 of the  
18 Energy Policy and Conservation Act (42 U.S.C. 6313) is  
19 amended by adding at the end the following new sub-  
20 section:

21 “(f) MULTIPLE STANDARDS.—If covered equipment  
22 includes 2 or more independent energy-using features, the  
23 Secretary may set more than 1 energy conservation  
24 standard for that covered equipment with respect to those  
25 features.”.

1   **SEC. 109. IMPROVING SCHEDULE FOR STANDARDS UPDAT-**  
2                   **ING AND CLARIFYING STATE AUTHORITY.**

3           (a) CONSUMER APPLIANCES.—Section 325(m) of the  
4   Energy Policy and Conservation Act (42 U.S.C. 6925(m))  
5   is amended to read as follows:

6           “(m) FURTHER RULEMAKING.—(1) Not later than 5  
7   years after issuance of any final rule establishing or  
8   amending a standard, as required for a product under this  
9   part, the Secretary shall publish either—

10           “(A) a notice of the Secretary’s determination  
11   that standards for that product do not need to be  
12   amended, based on the criteria in subsection (n)(2);  
13   or

14           “(B) a notice of proposed rulemaking including  
15   new proposed standards.

16   In either case, the Secretary shall also publish a no-  
17   tice stating that the Department’s analysis is pub-  
18   licly available, and provide opportunity for written  
19   comment.

20           “(2) Not later than 3 years after a notice is issued  
21   under paragraph (1)(B), the Secretary shall publish a  
22   final rule amending the standard for the product. Not  
23   later than 3 years after a determination under paragraph  
24   (1)(A), the Secretary shall make a new determination and  
25   publication under paragraph (1)(A) or (B).

1       “(3) An amendment prescribed under this subsection  
2 shall apply to products manufactured after a date which  
3 is 3 years after publication of the final rule establishing  
4 a standard, except that a manufacturer shall not be re-  
5 quired to apply new standards to a product with respect  
6 to which other new standards have been required within  
7 the prior 5 years.

8       “(4) If the Secretary does not publish a final deter-  
9 mination for a product by the date required in paragraph  
10 (1) or a final standard for a product by the date required  
11 in paragraph (2), then, notwithstanding section 327, a  
12 State shall not be preempted from establishing standards  
13 for that product until—

14               “(A) the date on which an amended Federal  
15 standard takes effect; or

16               “(B) 3 years after notice of a determination not  
17 to amend the standard.”.

18       (b) INDUSTRIAL EQUIPMENT.—Section 342(a)(6) of  
19 the Energy Policy and Conservation Act (42 U.S.C.  
20 6313(a)(6)) is amended—

21               (1) by redesignating subparagraph (C) as sub-  
22 paragraph (D); and

23               (2) by amending the remainder of the paragraph  
24 to read as follows:

1           “(6)(A) If ASHRAE/IES Standard 90.1 is  
2           amended with respect to any small commercial pack-  
3           age air conditioning and heating equipment, large  
4           commercial package air conditioning and heating  
5           equipment, packaged terminal air conditioners, pack-  
6           aged terminal heat pumps, warm-air furnaces, pack-  
7           aged boilers, storage water heaters, instantaneous  
8           water heaters, or unfired hot water storage tanks,  
9           the Secretary shall within 6 months publish in the  
10          Federal Register for public comment an analysis of  
11          the energy savings potential of the amended energy  
12          efficiency standards. The Secretary shall establish  
13          an amended uniform national standard for that  
14          product at the minimum level for each effective date  
15          specified in the amended ASHRAE/IES Standard  
16          90.1 within 18 months of the ASHRAE amend-  
17          ment’s publication, unless the Secretary determines,  
18          by rule published in the Federal Register, and sup-  
19          ported by clear and convincing evidence, that adop-  
20          tion of a uniform national standard more stringent  
21          than such amended ASHRAE/IES Standard 90.1  
22          for such product would result in significant addi-  
23          tional conservation of energy and is technologically  
24          feasible and economically justified.

1           “(B) If the Secretary issues a rule containing  
2           such a determination, the rule shall establish such  
3           amended standard, and shall be issued within 30  
4           months of the ASHRAE amendment’s publication.

5           “(C)(i) Not later than 5 years after issuance of  
6           any final rule establishing or amending a standard,  
7           as required for a product under this part, the Sec-  
8           retary shall publish either—

9                   “(I) a notice of the Secretary’s determina-  
10                  tion that standards for that product do not  
11                  need to be amended, based on the criteria in  
12                  subparagraph (A); or

13                   “(II) a notice of proposed rulemaking in-  
14                  cluding new proposed standards.

15           In either case, the Secretary shall also publish  
16           a notice stating that the Department’s analysis  
17           is publicly available, and provide opportunity  
18           for written comment.

19           “(ii) Not later than 3 years after a notice is  
20           issued under clause (i)(II), the Secretary shall pub-  
21           lish a final rule amending the standard for the prod-  
22           uct. Not later than 3 years after a determination  
23           under clause (i)(I), the Secretary shall make a new  
24           determination and publication under clause (i)(I) or  
25           (II).



1           “(iii) An amendment prescribed under this sub-  
2       paragraph shall apply to products manufactured  
3       after a date which is 3 years after publication of the  
4       final rule establishing a standard, except that a  
5       manufacturer shall not be required to apply new  
6       standards to a product with respect to which other  
7       new standards have been required within the prior  
8       5 years.

9           “(iv) If the Secretary does not publish a final  
10      determination for a product by the date required in  
11      clause (i) or a final standard for a product by the  
12      date required in clause (ii), then, notwithstanding  
13      section 327 and section 345(b)(2)(A), a State shall  
14      not be preempted from establishing standards for  
15      that product until—

16           “(I) the date on which an amended Fed-  
17      eral standard takes effect; or

18           “(II) 3 years after publication of a final  
19      rule under which a determination is made not  
20      to amend the standard.”.

21   **SEC. 110. UPDATING APPLIANCE TEST PROCEDURES.**

22       (a) CONSUMER APPLIANCES.—Section 323(b)(1)(A)  
23   of the Energy Policy and Conservation Act (42 U.S.C.  
24   6923(b)(1)(A)) is amended by striking “The Secretary  
25   may” and all that follows through “paragraph (3)” and

1 inserting “At least every 7 years the Secretary shall review  
2 test procedures for all covered products and shall—

3 “(i) amend test procedures with respect to any  
4 covered product if the Secretary determines that  
5 amended test procedures would more accurately or  
6 fully comply with the requirements of paragraph (3);  
7 or

8 “(ii) publish notice in the Federal Register of  
9 any determination not to amend a test procedure”.

10 (b) INDUSTRIAL EQUIPMENT.—Section 343(a)(1) of  
11 the Energy Policy and Conservation Act (42 U.S.C.  
12 6314(a)(1)) is amended by striking “The Secretary may”  
13 and all that follows through “this section” and inserting  
14 “At least every 7 years the Secretary shall conduct an  
15 evaluation of each class of covered equipment and—

16 “(B) if the Secretary determines that amended  
17 test procedures would more accurately or fully com-  
18 ply with the requirements of paragraphs (2) and (3),  
19 shall prescribe test procedures for such class in ac-  
20 cordance with the provisions of this section; or

21 “(C) shall publish notice in the Federal Reg-  
22 ister of any determination not to amend a test pro-  
23 cedure”.

1   **SEC. 111. FURNACE FAN STANDARD PROCESS.**

2           Section 325(f)(3)(D) of the Energy Policy and Con-  
3   servation Act (42 U.S.C. 6295(f)(3)(D)) is amended—

4           (1) by striking “may” and inserting “shall”; and

5           (2) by inserting “not later than July 1, 2013” after  
6   “duct work”.

7           **Subtitle B—Lighting Efficiency**

8   **SEC. 121. EFFICIENT LIGHT BULBS.**

9           (a) REGULATIONS.—Not later than 1 year after the  
10   date of enactment of this Act, the Secretary of Energy  
11   shall issue regulations—

12           (1) prohibiting the sale of light bulbs that emit  
13           less than 60 lumens per watt, effective January 1,  
14           2012;

15           (2) prohibiting the sale of light bulbs that emit  
16           less than 90 lumens per watt, effective January 1,  
17           2016; and

18           (3) prohibiting the sale of light bulbs that emit  
19           less than 120 lumens per watt, effective January 1,  
20           2020.

21           (b) EXEMPTIONS.—The regulations issued under  
22   subsection (a) shall include procedures for the Secretary  
23   to provide exemptions to the prohibition. The Secretary  
24   may provide such an exemption only in cases where the  
25   Secretary finds, after a hearing and opportunity for public  
26   comment, that it is not technically feasible to serve a spe-

1 cialized lighting application, such as a military, medical,  
2 or public safety application, using bulbs that meet the re-  
3 quirements of subsection (a). Exemptions provided under  
4 this subsection shall expire after 2 years. No exemption  
5 may be provided under this subsection for general illu-  
6 mination applications.

7 (c) CIVIL PENALTY.—The Secretary of Energy shall  
8 include in regulations under this section a schedule of ap-  
9 propriate civil penalties for violations of the prohibition  
10 under this section. Such penalties shall be in an amount  
11 sufficient to ensure compliance with this section.

12 (d) PLAN.—Not later than 6 months after the date  
13 of enactment of this Act, the Secretary of Energy shall  
14 transmit to the Congress a plan for encouraging and pro-  
15 viding incentives for the use of more efficient light bulbs  
16 by consumers and businesses.

17 (e) DEFINITION.—For purposes of this section, the  
18 term “general illumination” means lighting designed to  
19 provide a substantially uniform level of luminance  
20 throughout an area exclusive of any provision for special  
21 or local requirements.

22 **SEC. 122. INCANDESCENT REFLECTOR LAMPS.**

23 (a) DEFINITIONS.—Section 321 of the Energy Policy  
24 and Conservation Act (42 U.S.C. 6291) is amended—

25 (1) in paragraph (30)(C)(ii)—

1 (A) in the matter preceding subclause

2 (I)—

3 (i) by striking “or similar bulb shapes

4 (excluding ER or BR)” and inserting “ER,

5 BR, BPAR, or similar bulb shapes”; and

6 (ii) by striking “2.75” and inserting

7 “2.25”; and

8 (B) by striking “is either—” and all that

9 follows through subclause (II) and inserting

10 “has a rated wattage that is greater than 40

11 watts.”; and

12 (2) by adding at the end the following:

13 “(52) The term ‘BPAR incandescent reflector

14 lamp’ means a reflector lamp as shown in figure

15 C78.21–278 on page 32 of ANSI C78.21–2003.

16 “(53)(A) The term ‘BR incandescent reflector

17 lamp’ means a reflector lamp that has—

18 “(i) a bulged section below the major di-

19 ameter of the bulb and above the approximate

20 baseline of the bulb, as shown in figure 1 (RB)

21 on page 7 of ANSI C79.1—1994, incorporated

22 by reference in section 430.22 of title 10, Code

23 of Federal Regulations (as in effect on the date

24 of enactment of this paragraph); and

1                   “(ii) a finished size and shape shown in  
2                   ANSI C78.21—1989, including the referenced  
3                   reflective characteristics in part 7 of ANSI  
4                   C78.21.

5                   “(B) The term ‘BR30’ refers to a BR incandes-  
6                   cent reflector lamp with a diameter of 30/8ths of an  
7                   inch and the term ‘BR40’ refers to a BR incandes-  
8                   cent reflector lamp with a diameter of 40/8ths of an  
9                   inch.

10                  “(54)(A) The term ‘ER incandescent reflector  
11                  lamp’ means a reflector lamp that has—

12                         “(i) an elliptical section below the major  
13                         diameter of the bulb and above the approximate  
14                         baseline of the bulb, as shown in figure 1 (RE)  
15                         on page 7 of ANSI C79.1—1994, incorporated  
16                         by reference in section 430.22 of title 10, Code  
17                         of Federal Regulations (as in effect on the date  
18                         of enactment of this paragraph); and

19                         “(ii) a finished size and shape shown in  
20                         ANSI C78.21—1989, incorporated by reference  
21                         in section 430.22 of title 10, Code of Federal  
22                         Regulations (as in effect on the date of enact-  
23                         ment of this paragraph).

24                   “(B) The term ‘ER30’ refers to an ER incan-  
25                   descent reflector lamp with a diameter of 30/8ths of

1 an inch and the term ‘ER40’ refers to an ER incan-  
2 descent reflector lamp with a diameter of 40/8ths of  
3 an inch.

4 “(55) The term ‘R20 incandescent reflector  
5 lamp’ means a reflector lamp that has a face diame-  
6 ter of approximately 2.5 inches, as shown in figure  
7 1(R) on page 7 of ANSI C79.1–1994.”.

8 (b) STANDARDS FOR FLUORESCENT LAMPS AND IN-  
9 CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the  
10 Energy Policy and Conservation Act (42 U.S.C. 6925(i))  
11 is amended by striking paragraph (1) and inserting the  
12 following:

13 “(1) STANDARDS.—

14 “(A) DEFINITION OF EFFECTIVE DATE.—

15 In this paragraph, except as specified in sub-  
16 paragraphs (C) and (D), the term ‘effective  
17 date’ means, with respect to each type of lamp  
18 specified in a table contained in subparagraph  
19 (B), the last day of the period of months cor-  
20 responding to that type of lamp, as specified in  
21 the table, that follows the date of enactment of  
22 the [short title].

23 “(B) MINIMUM STANDARDS.—Each of the  
24 following general service fluorescent lamps and  
25 incandescent reflector lamps manufactured

1 after the effective date specified in the tables  
 2 contained in this paragraph shall meet or ex-  
 3 ceed the following lamp efficacy and CRI stand-  
 4 ards:

“FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
4-foot medium bi-pin .....	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped .....	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline .....	65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output .....	>100 W	69	80.0	18
	≤100 W	45	80.0	18

“INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
40–50 .....	10.5	36
51–66 .....	11.0	36
67–85 .....	12.5	36
86–115 .....	14.0	36
116–155 .....	14.5	36
156–205 .....	15.0	36

5 “(C) EXEMPTIONS.—The standards speci-  
 6 fied in subparagraph (B) shall not apply to the  
 7 following types of incandescent reflector lamps:

8 “(i) Lamps rated at 50 watts or less  
 9 of the following types: ER30, BR30,  
 10 BR40, and ER40 lamps.

11 “(ii) Lamps rated at 65 watts of the  
 12 following types: BR30, BR40, and ER40  
 13 lamps.



## 33

1 “(iii) R20 incandescent reflector  
2 lamps of 45 watts or less.

3 “(D) EFFECTIVE DATES.—

4 “(i) ER, BR, AND BPAR LAMPS.—Ex-  
5 cept as provided in subparagraph (A), the  
6 standards specified in subparagraph (B)  
7 shall apply with respect to ER incandes-  
8 cent reflector lamps, BR incandescent re-  
9 flector lamps, BPAR incandescent reflector  
10 lamps, and similar bulb shapes on and  
11 after January 1, 2008.

12 “(ii) LAMPS BETWEEN 2.25–2.75  
13 INCHES IN DIAMETER.—The standards  
14 specified in subparagraph (B) shall apply  
15 with respect to incandescent reflector  
16 lamps with a diameter of more than 2.25  
17 inches, but not more than 2.75 inches, on  
18 and after January 1, 2008.”.

19 **SEC. 123. USE OF ENERGY EFFICIENT LIGHTING FIXTURES**  
20 **AND BULBS.**

21 (a) IN GENERAL.—Chapter 33 of title 40, United  
22 States Code, is amended—

23 (1) by redesignating sections 3313, 3314, and  
24 3315 as sections 3314, 3315, and 3316, respectively;  
25 and

1           (2) by inserting after section 3312 the fol-  
2       lowing:

3       **“§ 3313. Use of energy efficient lighting fixtures and**  
4               **bulbs**

5       “(a) CONSTRUCTION AND ALTERATION OF PUBLIC  
6 BUILDINGS.—Each public building constructed or signifi-  
7 cantly altered by the Administrator of General Services  
8 shall be equipped, to the maximum extent feasible as de-  
9 termined by the Administrator, with lighting fixtures and  
10 bulbs that are energy efficient.

11       “(b) MAINTENANCE OF PUBLIC BUILDINGS.—Each  
12 lighting fixture or bulb that is replaced by the Adminis-  
13 trator in the normal course of maintenance of public build-  
14 ings shall be replaced, to the maximum extent feasible as  
15 determined by the Administrator, with a lighting fixture  
16 or bulb that is energy efficient.

17       “(c) CONSIDERATIONS.—In making a determination  
18 under this section concerning the feasibility of installing  
19 a lighting fixture or bulb that is energy efficient, the Ad-  
20 ministrator shall consider—

21           “(1) the life cycle cost effectiveness of the fix-  
22       ture or bulb;

23           “(2) the compatibility of the fixture or bulb  
24       with existing equipment;

1           “(3) whether use of the fixture or bulb could re-  
2       sult in interference with productivity;

3           “(4) the aesthetics relating to use of the fixture  
4       or bulb; and

5           “(5) such other factors as the Administrator  
6       determines appropriate.

7           “(d) ENERGY STAR.—A lighting fixture or bulb shall  
8       be treated as being energy efficient for purposes of this  
9       section if—

10           “(1) the fixture or bulb is certified under the  
11       Energy Star program established by section 324A of  
12       the Energy Policy and Conservation Act (42 U.S.C.  
13       6294a); or

14           “(2) the Administrator has otherwise deter-  
15       mined that the fixture or bulb is energy efficient.

16           “(e) SIGNIFICANT ALTERATIONS.—A public building  
17       shall be treated as being significantly altered for purposes  
18       of subsection (a) if the alteration is subject to congres-  
19       sional approval under section 3307.

20           “(f) EFFECTIVE DATE.—The requirements of sub-  
21       sections (a) and (b) shall take effect one year after the  
22       date of enactment of this subsection.”.

23           (b) CONFORMING AMENDMENT.—The analysis for  
24       chapter 33 of title 40, United States Code, is amended

1 by striking the items relating to sections 3313, 3314, and  
2 3315 and inserting the following:

“3313. Use of energy efficient lighting fixtures and bulbs.

“3314. Delegation.

“3315. Report to Congress.

“3316. Certain authority not affected.”.

### 3 Subtitle C—Building Efficiency

#### 4 SEC. 131. ENCOURAGING STRONGER BUILDING CODES.

(a) IN GENERAL.—Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

8 "SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-  
9 CIENCY CODES.

10 “(a) UPDATING NATIONAL MODEL BUILDING EN-  
11 ERGY CODES.—(1) The Secretary shall support updating  
12 the national model building energy codes and standards  
13 at least every three years to achieve overall energy savings,  
14 compared to the 2006 IECC for residential buildings and  
15 ASHRAE Standard 90.1 2004 for commercial buildings,  
16 of at least—

17           “(A) 30 percent by 2010;

18 “(B) 50 percent by 2020; and

19 “(C) targets to be set by the Secretary in inter-  
20 mediate and subsequent years, at the maximum level  
21 of energy efficiency that is technologically feasible  
22 and life-cycle cost effective.

1 “(2)(A) Whenever the provisions of the IECC or  
2 ASHRAE Standard 90.1 regarding building energy use  
3 are revised, the Secretary shall, not later than 6 months  
4 after the date of such revision, determine—

5 “(i) whether such revision will improve energy  
6 efficiency in buildings; and

7 “(ii) whether such revision will meet the targets  
8 under paragraph (1).

9 “(B) If the Secretary makes a determination under  
10 subparagraph (A)(ii) that a code or standard does not  
11 meet the targets under paragraph (1), or if a national  
12 model code or standard is not updated for more than three  
13 years, then the Secretary shall within 12 months propose  
14 a modified code or standard that meets such targets. The  
15 modified code or standard shall serve as the baseline for  
16 the next determination under subparagraph (A)(i).

17 “(C) The Secretary shall provide the opportunity for  
18 public comment on targets, determinations, and modified  
19 codes and standards under this subsection, and shall pub-  
20 lish notice of targets, determinations, and modified codes  
21 and standards under this subsection in the Federal Reg-  
22 ister.

23 “(b) STATE CERTIFICATION OF BUILDING ENERGY  
24 CODE UPDATES.—(1) Not later than 2 years after the  
25 date of enactment of the [short title], each State shall cer-

1 tify to the Secretary that it has reviewed and updated the  
2 provisions of its residential and commercial building codes  
3 regarding energy efficiency. Such certification shall in-  
4 clude a demonstration that such State's code provisions  
5 meet or exceed the 2006 IECC for residential buildings  
6 and the ASHRAE Standard 90.1-2004 for commercial  
7 buildings, or achieve equivalent or greater energy savings.

8       “(2)(A) If the Secretary makes an affirmative deter-  
9 mination under subsection (a)(2)(A)(i) or proposes a  
10 modified code or standard under subsection (a)(2)(B),  
11 each State shall within 2 years certify that it has reviewed  
12 and updated the provisions of its building code regarding  
13 energy efficiency. Such certification shall include a dem-  
14 onstration that such State's code provisions meet or ex-  
15 ceed the revised code or standard, or achieve equivalent  
16 or greater energy savings.

17       “(B) If the Secretary fails to make a determination  
18 under subsection (a)(2)(A)(i) by the date specified in sub-  
19 section (a)(2), or makes a negative determination, each  
20 State shall within 2 years after the specified date or the  
21 date of the determination, certify that it has reviewed the  
22 revised code or standard, and updated the provisions of  
23 its building code regarding energy efficiency to meet or  
24 exceed any provisions found to improve energy efficiency

1 in buildings, or to achieve equivalent or greater energy  
2 savings in other ways.

3 “(c) STATE CERTIFICATION OF COMPLIANCE WITH  
4 BUILDING CODES.—(1) Each State shall, not later than  
5 3 years after a certification under subsection (b), certify  
6 that it has achieved compliance with the certified building  
7 energy code. Such certification shall include documenta-  
8 tion of the rate of compliance based on independent in-  
9 spections of a random sample of the new and renovated  
10 buildings covered by the code in the preceding year.

11 “(2) A State shall be considered to achieve compli-  
12 ance under paragraph (1) if—

13 “(A) at least 90 percent of new and renovated  
14 buildings covered by the code in the preceding year  
15 substantially meet all the requirements of the code;  
16 or

17 “(B) the estimated excess energy use of new  
18 and renovated buildings that did not meet the code  
19 in the preceding year, compared to a baseline of  
20 comparable buildings that meet the code, is not more  
21 than 10 percent of the estimated energy use of all  
22 new and renovated buildings covered by the code in  
23 the preceding year.

24 “(d) FAILURE TO MEET DEADLINES.—(1) The Sec-  
25 retary shall permit extensions of the deadlines for the cer-

1 tification requirements under subsections (b) and (c) of  
2 this section for up to 1 year if a State can demonstrate  
3 that it has made a good faith effort to comply with such  
4 requirements and that it has made significant progress in  
5 doing so.

6 “(2) Any State for which the Secretary has not ac-  
7 cepted a certification by a deadline under subsection (b)  
8 or (c) of this section, with any extension granted under  
9 paragraph (1), is out of compliance with this section.

10 “(3) In any State that is out of compliance with this  
11 section, a local government may be in compliance with this  
12 section by meeting the certification requirements under  
13 subsections (b) and (c) of this section.

14 “(e) TECHNICAL ASSISTANCE.—(1) The Secretary  
15 shall provide technical assistance, including building en-  
16 ergy analysis and design tools, building demonstrations,  
17 and design assistance and training to enable the national  
18 model building energy codes and standards to meet the  
19 targets in subsection (a)(1).

20 “(2) The Secretary shall provide technical assistance  
21 to States to implement the requirements of this section,  
22 including procedures for States to demonstrate that their  
23 code provisions achieve equivalent or greater energy sav-  
24 ings than the national model codes and standards, and to  
25 improve and implement State residential and commercial



1 building energy efficiency codes or to otherwise promote  
2 the design and construction of energy efficient buildings.

3 “(f) AVAILABILITY OF INCENTIVE FUNDING.—(1)

4 The Secretary shall provide incentive funding to States to  
5 implement the requirements of this section, and to im-  
6 prove and implement State residential and commercial  
7 building energy efficiency codes, including increasing and  
8 verifying compliance with such codes. In determining  
9 whether, and in what amount, to provide incentive funding  
10 under this subsection, the Secretary shall consider the ac-  
11 tions proposed by the State to implement the requirements  
12 of this section, to improve and implement residential and  
13 commercial building energy efficiency codes, and to pro-  
14 mote building energy efficiency through the use of such  
15 codes.

16 “(2) Additional funding shall be provided under this  
17 subsection for implementation of a plan to achieve and  
18 document at least a 90 percent rate of compliance with  
19 residential and commercial building energy efficiency  
20 codes, based on energy performance—

21 “(A) to a State that has adopted and is imple-  
22 menting, on a Statewide basis—

23 “(i) a residential building energy efficiency  
24 code that meets or exceeds the requirements of  
25 the 2006 IECC, or any succeeding version of

1           that code that has received an affirmative de-  
2           termination from the Secretary under sub-  
3           section (a)(2)(A)(i); and

4                 “(ii) a commercial building energy effi-  
5           ciency code that meets or exceeds the require-  
6           ments of the ASHRAE Standard 90.1-2004, or  
7           any succeeding version of that standard that  
8           has received an affirmative determination from  
9           the Secretary under subsection (a)(2)(A)(i); or  
10           “(B) in a State in which there is no Statewide  
11          energy code either for residential buildings or for  
12          commercial buildings, to a local government that has  
13          adopted and is implementing residential and com-  
14          mercial building energy efficiency codes, as described  
15          in subparagraph (A).

16          “(3) Of the amounts made available under this sub-  
17          section, the Secretary may use \$500,000 or more for each  
18          fiscal year to train State and local officials to implement  
19          codes described in paragraph (2).

20          “(4)(A) There are authorized to be appropriated to  
21          carry out this subsection—

22                 “(i) \$25,000,000 for each of fiscal years 2008  
23           through 2012; and

24                 “(ii) such sums as are necessary for fiscal year  
25           2013 and each fiscal year thereafter.

1 “(B) Funding provided to States under paragraph  
2 (2) for each fiscal year shall not exceed one-half of the  
3 excess of funding under this subsection over \$5,000,000  
4 for the fiscal year.”.

5 (b) DEFINITION.—Section 303 of the Energy Con-  
6 servation and Production Act (42 U.S.C. 6832) is amend-  
7 ed by adding at the end the following new paragraph:

8 “(17) The term ‘IECC’ means the International  
9 Energy Conservation Code.”.

10 **SEC. 132. ENERGY CODE IMPROVEMENTS APPLICABLE TO**  
11 **MANUFACTURED HOUSING.**

12 (a) IN GENERAL.—Not later than 4 years after the  
13 date of enactment of this Act, the Secretary of Energy  
14 shall by regulation establish standards for energy effi-  
15 ciency in manufactured housing.

16 (b) CERTAIN REQUIREMENTS.—The regulations  
17 under subsection (a) shall be in accordance with the fol-  
18 lowing:

19 (1) The energy conservation standards estab-  
20 lished under this subsection shall be based on the  
21 most recent version of the International Energy  
22 Conservation Code (including supplements) except  
23 where the Secretary finds that such code is not cost-  
24 effective, or a more stringent standard would be

1 more cost-effective, based on total life-cycle con-  
2 struction and operating costs.

3 (2) The energy conservation standards estab-  
4 lished under this subsection may—

5 (A) take into consideration the design and  
6 factory construction techniques of manufac-  
7 tured homes;

8 (B) be based on the climate zones estab-  
9 lished by the Department of Housing and  
10 Urban Development rather than those under  
11 the International Energy Conservation Code;  
12 and

13 (C) provide for alternative practices that  
14 result in net estimated energy consumption  
15 equal to or less than the specified standards.

16 (3) The energy conservation standards estab-  
17 lished under this subsection shall be updated within  
18 one year after the date of enactment of this Act and  
19 within one year after any revision to the Inter-  
20 national Energy Conservation Code.

21 (c) ENFORCEMENT.—Any manufacturer of manufac-  
22 tured housing that violates a provision of the regulations  
23 under subsection (a) is liable to the United States for a  
24 civil penalty in an amount not exceeding 1 percent of the

1 manufacturer's retail list price of the manufactured hous-  
2 ing.

3 **SEC. 133. BASELINE BUILDING DESIGNS.**

4 Section 327(f)(3)(D) of the Energy Policy and Con-  
5 servation Act (42 U.S.C. 6297(f)(3)(D)) is amended to  
6 read as follows:

7 “(D) If the code uses one or more baseline  
8 building designs against which all submitted building  
9 designs are to be evaluated and such baseline build-  
10 ing designs contain a covered product subject to an  
11 energy conservation standard established in or pre-  
12 scribed under section 325, the baseline building de-  
13 signs are based on the efficiency level for such cov-  
14 ered product which—

15 “(i) meets but does not exceed such stand-  
16 ard;

17 “(ii) is the efficiency level required by a  
18 regulation of that State for which the Secretary  
19 has issued a rule granting a waiver under sub-  
20 section (d) of this section; or

21 “(iii) is a level that, when evaluated in the  
22 baseline building design, the State has found to  
23 be feasible and cost-effective.”.

1 **SEC. 134. TRAINING FEDERAL CONTRACTING OFFICERS TO**  
2 **NEGOTIATE ENERGY EFFICIENCY CON-**  
3 **TRACTS.**

4 (a) PROGRAM.—The Secretary of Energy shall create  
5 and administer in the Federal Energy Management Pro-  
6 gram a training program to educate Federal contract ne-  
7 gotiation and contract management personnel so that such  
8 contract officers are prepared to—

9 (1) negotiate energy savings performance con-  
10 tracts;

11 (2) conclude effective and timely contracts for  
12 energy efficiency services with all companies offering  
13 energy efficiency services; and

14 (3) review Federal contracts for all products  
15 and services for their potential energy efficiency op-  
16 portunities and implications.

17 (b) SCHEDULE.—The Federal Energy Management  
18 Program shall plan, staff, announce, and begin such train-  
19 ing not later than one year after the date of enactment  
20 of this Act.

21 (c) PERSONNEL TO BE TRAINED.—Personnel appro-  
22 priate to receive such training shall be selected by and sent  
23 for such training from—

24 (1) the Department of Defense;

25 (2) the Department of Veterans Affairs;

26 (3) the Department of Energy;

1 (4) the General Services Administration;

2 (5) the United States Postal Service; and

3 (6) all other Federal agencies and departments

4 that enter contracts for buildings, building services,

5 electricity and electricity services, natural gas and

6 natural gas services, heating and air conditioning

7 services, building fuel purchases, and other types of

8 procurement or service contracts determined by Fed-

9 eral Energy Management Program to offer the po-

10 tential for energy savings and greenhouse gas emis-

11 sion reductions if negotiated with such goals in

12 mind.

13 (d) TRAINERS.—Such training may be conducted by

14 attorneys or contract officers with experience in negoti-

15 ating and managing such contracts from any agency, and

16 the Department of Energy shall reimburse their related

17 salaries and expenses from amounts appropriated for car-

18 rying out this section to the extent they are not already

19 employees of the Department of Energy. Such training

20 may also be provided by private experts hired by the De-

21 partment of Energy for the purposes of this section, except

22 that the Department may not hire experts who are simul-

23 taneously employed by any company under contract to

24 provide such energy efficiency services to the Federal Gov-

25 ernment.

1 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated to the Secretary of En-  
3 ergy for carrying out this section \$750,000 for each of  
4 fiscal years 2008 through 2012.

5 **Subtitle D—Industrial Energy**

6 **SEC. 141. INDUSTRIAL ENERGY.**

7 (a) AMENDMENT.—Title III of the Energy Conserva-  
8 tion and Policy Act (42 U.S.C. 6201 and following) is  
9 amended by adding the following after part D:

10 **“PART E—INDUSTRIAL ENERGY**

11 **“SEC. 371. SURVEY OF WASTE INDUSTRIAL ENERGY RECOV-**  
12 **ERY AND POTENTIAL USE.**

13 “Congress finds that\_\_

14 “(1) the Nation should encourage the use of  
15 otherwise wasted energy and the development of  
16 combined heat and power projects where there is  
17 wasted thermal energy in large volumes at high tem-  
18 peratures;

19 “(2) such projects would increase energy effi-  
20 ciency and lower pollution by generating power with  
21 no incremental fossil fuel consumption;

22 “(3) because recovered waste energy and com-  
23 bined heat and power projects are associated with  
24 end-uses of thermal energy and electricity at the  
25 local level, they help avoid new transmission lines,



1       reduce line losses, and reduce vulnerability to ex-  
2       treme weather and terrorism; and

3           “(4) States, localities, electric utilities, and  
4       other electricity customers may benefit from private  
5       investments in recovered waste energy and combined  
6       heat and power projects at industrial and commer-  
7       cial sites by avoiding generation, transmission and  
8       distribution expenses, and transmission line loss ex-  
9       penses that may otherwise be required to be recov-  
10      ered from ratepayers.

11   **“SEC. 372. DEFINITIONS.**

12       “For purposes of this part:

13           “(1) The term ‘Administrator’ means the Ad-  
14      ministrator of the Environmental Protection Agency.

15           “(2) The term ‘waste energy’ means\_\_

16               “(A) exhaust heat and flared gases from  
17              any industrial process;

18               “(B) waste gas or industrial tail gas that  
19              would otherwise be flared, incinerated or vent-  
20              ed;

21               “(C) a pressure drop in any gas, excluding  
22              any pressure drop to a condenser that subse-  
23              quently vents the resulting heat; and

24               “(D) such other forms of waste energy as  
25              the Administrator may identify.

1           “(3) The term ‘recoverable waste energy’ means  
2           waste energy from which electricity or useful ther-  
3           mal energy may be recovered through modification  
4           of existing facilities or addition of new facilities.

5           “(4) The term ‘useful thermal energy’ is energy  
6           in the forms of direct heat, steam, hot water, or  
7           other thermal forms that can be used for heating,  
8           cooling, humidity control, process use, or other valid  
9           thermal end-use energy requirements, and for which  
10          fuel or electricity would typically and separately be  
11          consumed.

12          “(5) The term ‘combined heat and power sys-  
13          tem’ means a facility that simultaneously and effi-  
14          ciently produces useful thermal energy and elec-  
15          tricity, recovering not less than 60 percent of the en-  
16          ergy value in the fuel in the form of useful thermal  
17          energy and electricity.

18          “(6) The term ‘electric distribution utility’  
19          means any person or other entity selling electric en-  
20          ergy to the ultimate consumer thereof.

21   **“SEC. 373. SURVEY AND REGISTRY.**

22          “(a) RECOVERABLE WASTE-ENERGY INVENTORY  
23   PROGRAM.—The Administrator, in cooperation with State  
24   energy offices, shall establish a Recoverable Waste-Energy  
25   Inventory Program. The program shall include an ongoing

1 survey of all major industrial and large commercial com-  
2 bustion sources in the United States and the sites where  
3 these are located, together with a review of each for quan-  
4 tity and quality of waste energy.

5 “(b) CRITERIA.—The Administrator shall, within 180  
6 days after the enactment of this section, develop and pub-  
7 lish criteria to identify and designate those sources and  
8 sites in the inventory under subsection (a) that appear to  
9 offer recoverable waste energy projects or combined heat  
10 and power system projects with economic feasibility indi-  
11 cating a payback of invested costs within 5 years or less  
12 (including incentives offered under this part.)

13 “(c) TECHNICAL SUPPORT.—The Administrator shall  
14 provide to owners or operators of combustion sources tech-  
15 nical support and offer partial funding (up to one-half of  
16 total costs) for feasibility studies to confirm whether or  
17 not investment in recovery of waste energy or combined  
18 heat and power at that source would offer a payback pe-  
19 riod of 5 years or less.

20 “(d) REGISTRY.—(1) The Administrator shall, within  
21 one year after the enactment of this section, establish a  
22 Registry of recoverable waste-energy sources, and sites on  
23 which those sources are located, which meet the criteria  
24 set forth under subsection (b). The Administrator shall  
25 update the Registry on not less than a monthly basis, and

1 make the Registry accessible to the public on the Environ-  
2 mental Protection Agency web site.

3 “(2) The Administrator shall notify owners or opera-  
4 tors of Recoverable Waste-Energy Sites listed in the Reg-  
5 istry prior to public listing. Owners and operators of  
6 sources at such sites may elect to have their own listing  
7 not made public by notifying the Administrator of that  
8 election, and the Administrator shall remove the public no-  
9 tice with respect to any such listings.

10 “(3) The Administrator shall register and include on  
11 the Registry all sites meeting the criteria of subsection (b),  
12 whether made public or not. The Administrator shall cal-  
13 culate the total amounts of potentially recoverable waste  
14 energy from sources at such sites, nationally and by State,  
15 and shall make such totals public, together with informa-  
16 tion on the emissions savings that might be achieved with  
17 recovery of the waste energy from all sources listed in the  
18 Registry.

19 “(4) As waste energy projects achieve successful re-  
20 covery of waste energy, the Administrator shall remove the  
21 related sites or sources from the registry, and shall des-  
22 ignate the removed projects as eligible for incentive provi-  
23 sions established and regulatory treatment required by  
24 this part.

1       “(e) SELF-CERTIFICATION.—Owners, operators, or  
2 third-party developers of industrial waste-energy projects  
3 that qualify under standards established by the Adminis-  
4 trator may self-certify their sites or sources to the Admin-  
5 istrator for inclusion in the Registry, subject to procedures  
6 adopted by the Administrator. To prevent a fraudulent  
7 listing, the sources shall be included on the Registry only  
8 if the Administrator confirms the submitted data, at the  
9 Administrator’s discretion.

10       “(f) NEW FACILITIES.—As a new energy-consuming  
11 industrial facility is developed after the enactment of this  
12 part, to the extent it may constitute a site with recoverable  
13 waste energy that may qualify for the Registry, the Ad-  
14 ministrator may elect to include it in the Registry at the  
15 request of its owner or operator or developer on a condi-  
16 tional basis, removing the site if its development ceases.

17       “(g) OPTIMUM MEANS OF RECOVERY.—For each site  
18 listed in the Registry, at the request of the owner or oper-  
19 ator of the site, the Administrator shall offer, in coopera-  
20 tion with Clean Energy Application Centers operated by  
21 the Secretary of Energy, suggestions of optimum means  
22 of recovery of value from waste energy stream in the form  
23 of electricity, useful thermal energy, or other energy-re-  
24 lated products.

1       “(h) REVISION.—Each annual State report under  
2 section 548(a) of the National Energy Conservation Policy  
3 Act shall include the results of the survey for that State  
4 under this section.

5       “(i) AUTHORIZATION.—There are authorized to be  
6 appropriated to the Administrator for the purposes of cre-  
7 ating and maintaining the Registry and services author-  
8 ized by this section not more than \$1,000,000 for each  
9 of fiscal years 2008, 2009, 2010, 2010, and 2012 and not  
10 more than \$5,000,000 to the States to provide funding  
11 for State energy office functions under this section .

12   **“SEC. 374. INCENTIVES FOR RECOVERY, UTILIZATION AND**  
13                   **PREVENTION OF INDUSTRIAL WASTE EN-**  
14                   **ERGY.**

15       “(a) WASTE ENERGY RECOVERY INCENTIVE GRANT  
16 PROGRAM.—

17           “(1) ESTABLISHMENT.—There is established in  
18 the Environmental Protection Agency a Waste En-  
19 ergy Recovery Incentive Grant Program to provide  
20 incentive grants to owners and operators of projects  
21 that successfully produce electricity from waste en-  
22 ergy recovery.

23           “(2) PAYMENTS.—The Administrator shall  
24 make grants to the owners or operators of waste en-  
25 ergy recovery projects upon receipt of proof of elec-

1       tricity generation from the projects in a form pre-  
2       scribed by the Administrator, by rule.

3           “(3) RATE.—Incentive payments shall be made  
4       at the rate of \$10 per megawatt hour of documented  
5       electricity produced by each such project during the  
6       first 3 calendar years of such production.

7           “(4) AUTHORIZATION.—There is authorized to  
8       be appropriated to the Administrator \$100,000,000  
9       for fiscal year 2008, and \$200,00,000 for each of  
10      fiscal Years 2009, 2010, 2011, and 2012 for grants  
11      under this section, and such additional amounts as  
12      may be necessary for administration of the Waste  
13      Energy Recovery Incentive Grant Program.

14      “(b) SALES OF EXCESS POWER.—

15           “(1) ELIGIBILITY.—An owner or operator of a  
16      waste energy recovery project identified on the Reg-  
17      istry who successfully recovers waste energy in the  
18      form of electricity in amounts exceeding the total on-  
19      site consumption of electricity on the site where the  
20      project is located shall be eligible to benefit from the  
21      offers described in this section. Such excess shall be  
22      referred to in this subsection as the ‘net excess  
23      power’ .

24           “(2) STATE OFFERS.—Following notification to  
25      the Administrator, any State may elect to adminster

1 a State program under which eligible owners or op-  
2 erators (as described in paragraph (1)) are offered  
3 one or more of the following options set forth in sub-  
4 paragraph (A), (B), or (C) for disposal of the net  
5 excess power:

6 “(A) SALE OF NET EXCESS POWER TO  
7 UTILITY.—(i) The State may require distribu-  
8 tion utilities to purchase the net excess power  
9 under a long-term contract with the owner or  
10 operator of the eligible waste-energy recovery  
11 project.

12 “(ii) The rates at which a distribution util-  
13 ity shall purchase such power shall equal the  
14 distribution utility’s retail rate for sales to the  
15 same class of customer (on the same time of de-  
16 livery basis if applicable), minus the utility’s  
17 gross pre-tax per-unit profit margin for sales to  
18 that class of customer.

19 “(iii) In States with unbundled competitive  
20 market clearing prices for retail sales of elec-  
21 tricity, States may offer such prices for the net  
22 excess power purchased by the utility.

23 “(iv) No electric utility shall be required to  
24 purchase an amount of net excess power under  
25 this subparagraph that exceeds the capacity of



1 the wires, meter, and other equipment of the  
2 utility serving the site unless the owner or oper-  
3 ator of the project agrees to pay necessary and  
4 reasonable upgrade costs.

5 “(B) RETAIL WHEELING.—(i) The State  
6 may require distribution utilities to offer to  
7 wheel power from the project for retail resale  
8 within the area served by the utility distribution  
9 system substation that provides electric service  
10 to the project.

11 “(ii) If the State elects to make an offer  
12 under this subparagraph, the State shall waive  
13 any law prohibiting such sales, restricting the  
14 area in which such sales may be made or  
15 treating any person making such sales as a  
16 State regulated electric utility.

17 “(iii) The rate to be charged by the dis-  
18 tribution utility for such retail wheeling shall  
19 exclude charges for transmission costs but in-  
20 clude any expenses associated with reasonable  
21 upgrades needed to wheel the power as well as  
22 charges equivalent to the distribution utility’s  
23 gross pretax profit margin as applied to its dis-  
24 tribution assets on a per-unit basis.

1                   “(C) WAIVERS.—The State may waive any  
2                   State law prohibiting\_\_

3                   “(i) the construction of private wires  
4                   by or on behalf of the owner or operator of  
5                   the project to connect to, and make of the  
6                   net excess electric power from the project  
7                   to, up to 3 power purchasers within a ra-  
8                   dius of not to exceed 3 miles without any  
9                   connection of such wires to the local utility  
10                  system; and

11                  “(ii) the use or crossing of public  
12                  rights-of-way by such private wires.

13                  Sales of power to such power purchasers by the  
14                  project owner or operator shall be separately  
15                  metered and segregated from any sales by the  
16                  distribution utility.

17                  “(3) EPA AUTHORITY.—(A) If any State fails  
18                  to notify the Administrator of its election to make  
19                  the offers described in paragraph (2), or if the Ad-  
20                  ministrator determines, after notice and opportunity  
21                  for hearing, that the State has failed to make such  
22                  offers in accordance with this subsection, the Admin-  
23                  istrator shall make such offers to the eligible owners  
24                  and operators, and take such actions as may be nec-

1        necessary to authorize the actions described in subpara-  
2        graphs (A), (B), and (C) of paragraph (2) .

3            “(B) Any action by the Administrator under  
4        this paragraph shall preempt any State or local laws  
5        or rules that are inconsistent with such actions.

6            “(C) Upon the petition of the owner or operator  
7        of any eligible source in any State, the Adminis-  
8        trator shall determine whether the State has failed  
9        to comply with this subsection.

10    **“SEC. 375. CLEAN ENERGY APPLICATION CENTERS.**

11        “(a) PURPOSE.—The purpose of this section is to re-  
12        name and provide for the continued operation of the  
13        United States Department of Energy’s Regional Com-  
14        bined Heat and Power (CHP) Application Centers.

15        “(b) FINDINGS.—The Congress finds the Depart-  
16        ment of Energy’s Regional Combined Heat and Power  
17        (CHP) Application Centers program has produced signifi-  
18        cant energy savings and climate change benefits and will  
19        continue to do so through the deployment of clean energy  
20        technologies such as Combined Heat and Power (CHP),  
21        recycled waste energy and biomass energy systems, in the  
22        industrial and commercial energy markets.

23        “(c) RENAMING.—The Combined Heat and Power  
24        Application Centers at the Department of Energy are  
25        hereby be redesignated as Clean Energy Application Cen-

1   ters. Any reference in any law, rule or regulation or publi-  
2   cation to the Combined Heat and Power Application Cen-  
3   ters shall be treated as a reference to the Clean Energy  
4   Application Centers.

5       “(d) RELOCATION.—In order to better coordinate ef-  
6   forts with the separate Industrial Assessment Centers and  
7   to assure that the energy efficiency and, when applicable,  
8   the renewable nature of deploying mature clean energy  
9   technology is fully accounted for, the Secretary of Energy  
10   shall relocate the administration of the Clean Energy Ap-  
11   plication Centers to the Office of Energy Efficiency and  
12   Renewable Energy within the Department of Energy. The  
13   Office of Electricity Delivery and Energy Reliability shall  
14   continue to perform work on the role of such technology  
15   in support of the grid and its reliability and security, and  
16   shall assist the Clean Energy Application Centers in their  
17   work with regard to the grid and with electric utilities.

18       “(e) GRANTS.—

19       “(1) IN GENERAL.—The Secretary of Energy  
20   shall make grants to universities, research centers,  
21   and other appropriate institutions to assure the con-  
22   tinued operations and effectiveness of 8 Regional  
23   Clean Energy Application Centers in each of the fol-  
24   lowing regions (as designated for such purposes as  
25   of the date of the enactment of this section):

1 “(A) Gulf Coast.

2 “(B) Intermountain.

3 “(C) Mid-Atlantic.

4 “(D) Midwest.

5 “(E) Northeast.

6 “(F) Northwest.

7 “(G) Pacific.

8 “(H) Southeast.

9 “(2) ESTABLISHMENT OF GOALS AND COMPLI-  
10 ANCE.—In making grants under this section, the  
11 Secretary shall ensure that sufficient goals are es-  
12 tablished and met by each Center throughout the  
13 program duration concerning outreach and tech-  
14 nology deployment.

15 “(f) ACTIVITIES.—Each Clean Energy Application  
16 Center shall operate a program to encourage deployment  
17 of clean energy technologies through education and out-  
18 reach to building and industrial professionals, and to other  
19 individuals and organizations with an interest in efficient  
20 energy use. In addition, the Centers shall provide project  
21 specific support to building and industrial professionals  
22 through assessments and advisory activities. Funds made  
23 available under this section may be used for the following  
24 activities:

1           “(1) Developing and distributing informational  
2 materials on clean energy technologies, including  
3 continuation of the eight existing Web sites.

4           “(2) Developing and conducting target market  
5 workshops, seminars, internet programs and other  
6 activities to educate end users, regulators, and  
7 stakeholders in a manner that leads to the deploy-  
8 ment of clean energy technologies.

9           “(3) Providing or coordinating onsite assess-  
10 ments for sites and enterprises that may consider  
11 deployment of clean energy technology.

12           “(4) Performing market research to identify  
13 high profile candidates for clean energy deployment

14           “(5) Providing consulting support to sites con-  
15 sidering deployment of clean energy technologies.

16           “(6) Assisting organizations developing clean  
17 energy technologies to overcome barriers to deploy-  
18 ment.

19           “(g) DURATION.—A grant awarded under this sec-  
20 tion shall be for a period of 5 years. each grant shall be  
21 evaluated annually for its continuation based on its activi-  
22 ties and results.

23           “(h) AUTHORIZATION.—There is authorized to be ap-  
24 propriated for purposes of this section the sum of

1 \$10,000,000 for each of fiscal years 2008, 2009, 2010,  
2 2011, and 2012.”.

3 (b) TABLE OF CONTENTS.—The table of contents for  
4 such Act is amended by inserting the following after the  
5 items relating to part D of title III:

“PART E—INDUSTRIAL ENERGY

“Sec. 371. Survey of waste industrial energy recovery and potential use.

“Sec. 372. Definitions.

“Sec. 373. Survey and registry.

“Sec. 374. Incentives for recovery, utilization and prevention of industrial waste  
energy.

“Sec. 375. Clean Energy Application Centers.”.

6 **Subtitle E—Energy Efficiency of**  
7 **Public Institutions**

8 **SEC. 151. SHORT TITLE.**

9 This subtitle may be cited as the “Sustainable En-  
10 ergy Institutional Infrastructure Act of 2007”.

11 **SEC. 152. FINDINGS.**

12 The Congress finds the following:

13 (1) Many institutional entities own and operate,  
14 or are served by, district energy systems.

15 (2) A variety of renewable energy resources  
16 could be tapped by governmental and institutional  
17 energy systems to meet energy requirements.

18 (3) Use of these renewable energy resources to  
19 meet energy requirements will reduce reliance on  
20 fossil fuels and the associated emissions of air pollu-  
21 tion and carbon dioxide.

1           (4) CHP is a highly efficient and environ-  
2           mentally beneficial means to generate electric energy  
3           and heat, and offers total efficiency much greater  
4           than conventional separate systems, where electric  
5           energy is generated at and transmitted long dis-  
6           tances from a centrally located generation facility,  
7           and onsite heating and cooling equipment is used to  
8           meet nonelectric energy requirements.

9           (5) Heat recovered in a CHP generation system  
10          can be used for space heating, domestic hot water,  
11          or process steam requirements, or can be converted  
12          to cooling energy to meet air conditioning require-  
13          ments.

14          (6) The increased efficiency of CHP results in  
15          reduction in emissions of air pollution and carbon di-  
16          oxide.

17          (7) District energy systems represent a key op-  
18          portunity for expanding implementation of CHP be-  
19          cause district energy systems provide a means of de-  
20          livering thermal energy from CHP to a substantial  
21          base of end users.

22          (8) District energy systems help cut peak power  
23          demand and reduce power transmission and distribu-  
24          tion system constraints by meeting air conditioning  
25          demand through delivery of chilled water produced



1 with CHP-generated heat or other energy sources,  
2 shifting power demand through thermal storage,  
3 and, with CHP, generating power near load centers.

4 (9) Evaluation and implementation of sustain-  
5 able energy infrastructure is a complex undertaking  
6 involving a variety of technical, economic, legal, and  
7 institutional issues and barriers, and technical as-  
8 sistance is often required to successfully navigate  
9 these barriers.

10 (10) The major constraint to significant expan-  
11 sion of sustainable energy infrastructure by institu-  
12 tional entities is a lack of capital funding for imple-  
13 mentation.

14 **SEC. 153. DEFINITIONS.**

15 For purposes of this subtitle—

16 (1) the term “CHP” means combined heat and  
17 power, or the generation of electric energy and heat  
18 in a single, integrated system;

19 (2) the term “district energy systems” means  
20 systems providing thermal energy to buildings and  
21 other energy consumers from one or more plants to  
22 individual buildings to provide space heating, air  
23 conditioning, domestic hot water, industrial process  
24 energy, and other end uses;

1           (3) the term “institutional entities” means local  
2           governments, municipal utilities, State governments,  
3           Federal agencies, and other entities established by  
4           local, State, or Federal agencies to meet public pur-  
5           poses, and public or private colleges, universities,  
6           airports, and hospitals;

7           (4) the term “renewable thermal energy  
8           sources” means non-fossil-fuel energy sources, in-  
9           cluding biomass, geothermal, solar, natural sources  
10          of cooling such as cold lake or ocean water, and  
11          other sources that can provide heating or cooling en-  
12          ergy;

13          (5) the term “sustainable energy infrastruc-  
14          ture” means facilities for production of energy from  
15          CHP or renewable thermal energy sources and dis-  
16          tribution of thermal energy to users; and

17          (6) the term “thermal energy” means heating  
18          or cooling energy in the form of hot water or steam  
19          (heating energy) or chilled water (cooling energy).

20   **SEC. 154. TECHNICAL ASSISTANCE PROGRAM.**

21          (a) ESTABLISHMENT.—The Secretary of Energy  
22          shall, with funds appropriated for this purpose, implement  
23          a program of information dissemination and technical as-  
24          sistance to institutional entities to assist them in identi-

1    fying, evaluating, designing, and implementing sustainable  
2    energy infrastructure.

3            (b) INFORMATION DISSEMINATION.—The Secretary  
4    shall develop and disseminate information and assessment  
5    tools addressing—

6            (1) identification of opportunities for sustain-  
7    able energy infrastructure;

8            (2) technical and economic characteristics of  
9    sustainable energy infrastructure;

10           (3) utility interconnection, and negotiation of  
11   power and fuel contracts;

12           (4) financing alternatives;

13           (5) permitting and siting issues;

14           (6) case studies of successful sustainable energy  
15   infrastructure systems; and

16           (7) computer software for assessment, design,  
17   and operation and maintenance of sustainable en-  
18   ergy infrastructure systems.

19           (c) ELIGIBLE COSTS.—Upon application by an insti-  
20   tutional entity, the Secretary may make grants to such  
21   applicant to fund—

22           (1) 75 percent of the cost of feasibility studies  
23   to assess the potential for implementation of sus-  
24   tainable energy infrastructure;

1           (2) 60 percent of the cost of guidance on over-  
2       coming barriers to project implementation, including  
3       financial, contracting, siting, and permitting bar-  
4       riers; and

5           (3) 45 percent of the cost of detailed engineer-  
6       ing and design of sustainable energy infrastructure.

7       (d) AUTHORIZATION OF APPROPRIATIONS.—There  
8       are authorized to be appropriated to carry out this section  
9       \$15,000,000 for fiscal year 2008, \$15,000,000 for fiscal  
10      year 2009, and \$15,000,000 for fiscal year 2010.

11   **SEC. 155. REVOLVING FUND.**

12      (a) ESTABLISHMENT.—The Secretary of Energy  
13      shall, with funds appropriated for this purpose, create a  
14      Sustainable Institutions Revolving Fund for the purpose  
15      of establishing and operating a Sustainable Institutions  
16      Revolving Fund (in this section referred to as the  
17      “SIRF”) for the purpose of providing loans for the con-  
18      struction of sustainable energy infrastructure to serve in-  
19      stitutional entities.

20      (b) ELIGIBLE COSTS.—A loan provided from the  
21      SIRF shall be for no more than 70 percent of the total  
22      capital costs of a project, and shall not exceed  
23      \$15,000,000. Such loans shall be for constructing sustain-  
24      able energy infrastructure, including—

1           (1) plant facilities used for producing thermal  
2           energy, electricity, or both;

3           (2) facilities for storing thermal energy;

4           (3) facilities for distribution of thermal energy;

5           and

6           (4) costs for converting buildings to use ther-  
7           mal energy from sustainable energy sources.

8           (c) QUALIFICATIONS.—Loans from the SIRF may be  
9           made to institutional entities for projects meeting the  
10          qualifications and conditions established by the Secretary,  
11          including the following minimum qualifications:

12          (1) The project shall be technically and eco-  
13          nomically feasible as determined by a detailed feasi-  
14          bility analysis performed or corroborated by an inde-  
15          pendent consultant.

16          (2) The borrower shall demonstrate that ade-  
17          quate and comparable financing was not found to be  
18          reasonably available from other sources, and that  
19          the project is economically more feasible with the  
20          availability of the SIRF loan.

21          (3) The borrower shall obtain commitments for  
22          the remaining capital required to implement the  
23          project, contingent on approval of the SIRF loan.

24          (d) FINANCING TERMS.—(1) Interest on a loan under  
25          this section may be a fixed rate or floating rate, and shall

1 be equal to the Federal cost of funds consistent with the  
2 loan type and term, minus 1.5 percent.

3 (2) Interest shall accrue from the date of the loan,  
4 but the first payment of interest shall be deferred, if de-  
5 sired by the borrower, for a period ending not later than  
6 3 years after the initial date of operation of the system.

7 (3) Interest attributable to the period of deferred  
8 payment shall be amortized over the remainder of the loan  
9 term.

10 (4) Principal shall be repaid on a schedule established  
11 at the time the loan is made. Such payments shall begin  
12 not later than 3 years after the initial date of operation  
13 of the system.

14 (5) Loans made from the SIRF shall be repayable  
15 over a period ending not more than 20 years after the  
16 date the loan is made.

17 (6) Loans shall be prepayable at any time without  
18 penalty.

19 (7) SIRF loans shall be subordinate to other loans  
20 for the project.

21 (e) FUNDING CYCLES.—Applications for loans from  
22 the SIRF shall be received on a periodic basis at least  
23 semiannually.

24 (f) APPLICATION OF REPAYMENTS FOR DEFICIT RE-  
25 Duction.—Loans from the SIRF shall be made, with

1 funds available for this purpose, during the 10 years start-  
2 ing from the date that the first loan from the fund is  
3 made. Until this 10-year period ends, funds repaid by bor-  
4 rowers shall be deposited in the SIRF to be made available  
5 for additional loans. Once loans from the SIRF are no  
6 longer being made, repayments shall go directly into the  
7 United States Treasury.

8 (g) PRIORITIES.—In evaluating projects for funding,  
9 priority shall be given to projects which—

10 (1) maximize energy efficiency;

11 (2) minimize environmental impacts, including  
12 from regulated air pollutants, greenhouse gas emis-  
13 sions, and the use of refrigerants known to cause  
14 ozone depletion;

15 (3) use renewable energy resources;

16 (4) maximize oil displacement; and

17 (5) benefit economically-depressed areas.

18 (h) REGULATIONS.—Not later than one year after  
19 the date of enactment of this Act, the Secretary of Energy  
20 shall develop a plan and adopt rules and procedures for  
21 establishing and operating the SIRF.

22 (i) PROGRAM REVIEW.—Every two years the Sec-  
23 retary shall report to the Congress on the status and  
24 progress of the SIRF.

1 (j) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated to carry out this section  
3 \$85,000,000 for fiscal year 2008, \$185,000,000 for fiscal  
4 year 2009, and \$185,000,000 for fiscal year 2010.

5 **Subtitle F—Energy Savings**  
6 **Performance Contracting**

7 **SEC. 161. DEFINITION OF ENERGY SAVINGS.**

8 Section 804(2) of the National Energy Conservation  
9 Policy Act (42 U.S.C. 8287c(2)) is amended—

10 (1) by redesignating subparagraphs (A), (B),  
11 and (C) as clauses (i), (ii), and (iii), respectively,  
12 and indenting appropriately;

13 (2) by striking “means a reduction” and insert-  
14 ing “means—

15 “(A) a reduction”;

16 (3) by striking the period at the end and insert-  
17 ing a semicolon; and

18 (4) by adding at the end the following:

19 “(B) the increased efficient use of an exist-  
20 ing energy source by cogeneration or heat re-  
21 covery, and installation of renewable energy sys-  
22 tems;

23 “(C) the sale or transfer of electrical or  
24 thermal energy generated onsite but in excess



1 of Federal needs, to utilities or non-Federal en-  
2 ergy users; and

3 “(D) the increased efficient use of existing  
4 water sources in interior or exterior applica-  
5 tions.”.

6 **SEC. 162. FINANCING FLEXIBILITY.**

7 Section 801(a)(2) of the National Energy Conserva-  
8 tion Policy Act (42 U.S.C. 8287(a)(2)) is amended by add-  
9 ing at the end the following:

10 “(E) SEPARATE CONTRACTS.—In carrying out a con-  
11 tract under this title, a Federal agency may—

12 “(i) enter into a separate contract for energy  
13 services and conservation measures under the con-  
14 tract; and

15 “(ii) provide all or part of the financing nec-  
16 essary to carry out the contract.”.

17 **SEC. 163. REPORTING.**

18 Section 548(a)(2) of the National Energy Conserva-  
19 tion Policy Act (42 U.S.C. 8258(a)(2)) is amended by in-  
20 serting “and any termination penalty exposure” after “the  
21 energy and cost savings that have resulted from such con-  
22 tracts”.

1       **Subtitle G—Reauthorizations**

2       **SEC. 171. LOW-INCOME HOME ENERGY ASSISTANCE PRO-**  
3                   **GRAM.**

4       Section 2602(b) of the Low-Income Home Energy  
5       Assistance Act of 1981 (42 U.S.C. 8621(b)) is amended  
6       by striking “and \$5,100,000,000 for each of fiscal years  
7       2005 through 2007” and inserting “and \$5,100,000,000  
8       for each of fiscal years 2007, 2008, 2009, 2010, 2011,  
9       and 2012”.

10      **SEC. 172. WEATHERIZATION ASSISTANCE PROGRAM.**

11      Section 422 of the Energy Conservation and Produc-  
12      tion Act (42 U.S.C. 6872) is amended by striking  
13      “\$500,000,000 for fiscal year 2006, \$600,000,000 for fis-  
14      cal year 2007, and \$700,000,000 for fiscal year 2008”  
15      and inserting “\$600,000,000 for fiscal year 2007, and  
16      \$750,000,000 for each of fiscal years 2008, 2009, 2010,  
17      2011, and 2012”.

18      **SEC. 173. STATE ENERGY PROGRAMS.**

19      Section 365(f) of the Energy Policy and Conservation  
20      Act (42 U.S.C. 6325(f)) is amended by striking  
21      “\$100,000,000 for each of the fiscal years 2006 and 2007  
22      and \$125,000,000 for fiscal year 2008” and inserting  
23      “\$125,000,000 for each of the fiscal years 2007, 2008,  
24      2009, 2010, 2011, and 2012”.

## 1   **Subtitle H—Technical Corrections**

### 2   **SEC. 181. TECHNICAL CORRECTIONS.**

3           (a) Section 135(a)(1)(A)(ii) of the Energy Policy Act  
4 of 2005 (Public Law 109–58) is amended by striking  
5 “C78.1–1978(R1984)” and inserting “C78.3–  
6 1978(R1984)”.

7           (b) Section 325 of the Energy Policy and Conserva-  
8 tion Act (42 U.S.C. 6295) (as amended by section  
9 135(c)(4) of the Energy Policy Act of 2005) is amended—

10               (1) in subsection (v)—

11                       (A) in the subsection heading, by striking  
12 “CEILING FANS AND”;

13                       (B) by striking paragraph (1); and

14                       (C) by redesignating paragraphs (2)  
15 through (4) as paragraphs (1) through (3), re-  
16 spectively; and

17               (2) in subsection (ff)—

18                       (A) in paragraph (1)(A)—

19                               (i) by striking clause (iii);

20                               (ii) by redesignating clause (iv) as  
21 clause (iii); and

22                               (iii) in clause (iii)(II) (as so redesign-  
23 nated), by inserting “fans sold for” before  
24 “outdoor”; and

25                       (B) in paragraph (4)(C)—

1 (i) in the matter preceding clause (i),  
2 by striking “subparagraph (B)” and in-  
3 serting “subparagraph (A)”;

4 (ii) by striking clause (ii) and insert-  
5 ing the following:

6 “(ii) shall be packaged with lamps to fill all  
7 sockets.”;

8 (C) in paragraph (6), by redesignating  
9 subparagraphs (C) and (D) as clauses (i) and  
10 (ii), respectively, of subparagraph (B); and

11 (D) in paragraph (7), by striking “327”  
12 the second place it appears and inserting  
13 “324”.

## 14 **TITLE II—ENERGY**

## 15 **INFORMATION ENHANCEMENT**

### 16 **SEC. 201. FINDINGS.**

17 The Congress finds that—

18 (1) the Energy Information Administration’s  
19 data is critical not merely for analysis of the role of  
20 energy in our economy and environment, but for the  
21 effective functioning of energy markets.

22 (2) Federal and State policymakers rely on the  
23 Energy Information Administration to collect and  
24 report State level energy information needed for en-  
25 ergy policymaking, compliance with Federal and

1 State mandates, and for purposes of emergency en-  
2 ergy assurance;

3 (3) as policymakers consider and implement  
4 policies to cut greenhouse gas emissions, accurate,  
5 timely, and comparable State energy information be-  
6 comes even more important;

7 (4) new sources of information about energy de-  
8 mand and supply have become available and need to  
9 be incorporated in the Energy Information Adminis-  
10 tration's data and analysis functions;

11 (5) the Energy Information Administration  
12 needs to maintain its ability to collect, process, and  
13 analyze data while confronting broader demands for  
14 information in greater detail; and

15 (6) budget constraints have forced the Energy  
16 Information Administration to curtail surveys relied  
17 upon by financial markets and could defer important  
18 improvements in the scope and quality of resulting  
19 information.

20 **SEC. 202. ASSESSMENT OF RESOURCES.**

21 (a) IN GENERAL.—The Administrator of the Energy  
22 Information Administration shall conduct an independent,  
23 comprehensive assessment of the resources, both in terms  
24 of dollars and manpower, required to upgrade the quality,

1 scope, and technologies necessary to produce energy infor-  
2 mation needed for efficient and evolving energy markets.

3 (b) 5-YEAR PLAN.—The Administrator of the Energy  
4 Information Administration shall establish a 5-year plan  
5 to enhance the quality and scope of the data collection nec-  
6 essary to ensure the scope, accuracy, and timeliness of the  
7 information needed for efficient functioning of energy  
8 markets and financial operations. Particular attention  
9 shall be paid to restoring data series terminated because  
10 of budget constraints, improvements in the area of oil and  
11 gas data, and the ability to provide data mandated by  
12 Congress.

13 (c) SUBMITTAL TO CONGRESS.—The Administrator  
14 shall submit this plan to Congress detailing improvements  
15 needed to bring the Energy Information Administration  
16 up to the standards of other statistical agencies in its abil-  
17 ity to collect and process energy information in a manner  
18 consistent with the needs of energy markets.

19 (d) GUIDELINES AND STANDARDS.—The Adminis-  
20 trator shall—

21 (1) establish guidelines and standards to ensure  
22 the quality and scope of State energy data, including  
23 data on energy production and consumption by prod-  
24 uct and sector and renewable and alternative

1 sources, required to provide a comprehensive, accu-  
2 rate energy profile at the State level;

3 (2) assess any existing gaps in data obtained by  
4 and compiled by the Energy Information Adminis-  
5 tration; and

6 (3) evaluate the most cost effective ways to ad-  
7 dress any data quality and quantity issues in con-  
8 junction with State officials.

9 The Energy Information Administration shall consult with  
10 State officials on a regular basis in establishing these  
11 guidelines, standards, and scope of State level data, as  
12 well as in exploring ways to address data needs.

13 (e) ASSESSMENT OF STATE DATA NEEDS.—The Ad-  
14 ministrator shall provide an assessment of these State-  
15 level data needs to the Congress not later than 1 year after  
16 the date of enactment of this Act, detailing a plan to ad-  
17 dress the needs identified.

18 (f) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated to the Administrator for  
20 carrying out this section, in addition to any other author-  
21 izations—

22 (1) \$10,000,000 for fiscal year 2008;

23 (2) \$10,000,000 for fiscal year 2009;

24 (3) \$10,000,000 for fiscal year 2010;

25 (4) \$15,000,000 for fiscal year 2011;

- 1                   (5) \$20,000,000 for fiscal year 2012; and
- 2                   (6) such sums as are necessary for subsequent
- 3           fiscal years.